

Evaluation Grid

We invite you to evaluate the automatically generated ontology using the criteria below. Your opinion is crucial in identifying the strengths and weaknesses of the ontology generated by our Ontology Toolkit. Please provide honest and constructive feedback.

The evaluation grid is divided into three sections. The first section focuses on evaluating classes, the second on properties, and the third on the overall assessment.

To ensure a common understanding of key terms, please refer to the following definitions before proceeding with the evaluation.

- Domain : sector of activity or knowledge field (e.g. finance, pharmacology, DIY products).
- Entity : any distinct element of the world, concrete or abstract (e.g. Amazon, aspirin, plumbing).
- Class : category of entities in an ontology (e.g. the *Company* class groups companies like Amazon; the *Medicine* class groups medicines like aspirin; the *Department* class groups departments like plumbing)
- Property : element that provides a specified information about a class or a relation between two classes (e.g. a *owns shares* property between the *Investor* class and the *Company* class; a *dosage* property associated to the *Medicine* class; a *is sold in* property between the *Product* class and the *Department* class).

Evaluation Scale

Each criterion should be rated on a scale from 1 to 5, where 1 represents poor performance, 2 indicates needs improvement, 3 reflects satisfactory performance, 4 denotes good performance, and 5 represents excellent performance.

Example :

Criteria	Poor (1)	Needs Improvement (2)	Satisfactory (3)	Good (4)	Excellent (5)
Classes accurately represent entities from the input text.	Classes do not accurately represent entities; major errors.	Few classes are accurate; significant errors.	Some classes are accurate; noticeable errors.	Most classes are accurate; minor errors.	All classes are accurate with no errors.

1. Classes

- 1.1. Classes accurately represent entities from the input text.
- 1.2. The class hierarchy in the ontology provides an accurate organization of the input text content.
- 1.3. Classes are accurately derived from the source material.
- 1.4. Definitions of classes match their meaning in the original content.
- 1.5. No incorrect or misleading classes are present in the ontology.
- 1.6. Classes are clear and unambiguous.
- 1.7. Class definitions are concise and easily understandable.
- 1.8. The ontology focuses on classes relevant to the intended domain.
- 1.9. The level of detail matches the needs of the intended use case.
- 1.10. The ontology does not include unnecessary classes.

Are there specific areas where the ontology classes could be improved, or any aspects that you believe were particularly well-executed?

2. Properties

- 2.1. The associations between properties and classes are correctly modeled to reflect the content in the input data.
- 2.2. Properties are accurately derived from the source material.
- 2.3. No incorrect or misleading properties are present in the ontology.
- 2.4. Definitions of properties match their meaning in the original content.
- 2.5. Key relations between classes are captured comprehensively by properties.
- 2.6. The ontology includes all relevant properties for each class. For example, verify if the properties "*inhabitant*", "*capital*", "*flag*" and "*leader*" are properly attached to the class "*Country*".
- 2.7. Properties clearly convey the nature of connections between classes.
- 2.8. Properties are described using clear and consistent terminology.
- 2.9. Properties captured are significant for the domain's understanding and use.
- 2.10. The level of detail matches the needs of the intended use case.
- 2.11. The ontology does not include unnecessary properties.

Are there specific areas where the ontology properties could be improved, or any aspects that you believe were particularly well-executed?

3. Overall

- 3.1. All relevant elements from the input text are represented in the ontology.
- 3.2. The ontology comprehensively covers all pertinent aspects of the domain.
- 3.3. No significant information from the source material, relevant to the ontology, is omitted.
- 3.4. The level of detail in the ontology matches that of the key information from the input text.
- 3.5. The ontology structure is logically organized. For example, in a healthcare ontology, all medical conditions are grouped under a parent class "Health Conditions," with subcategories like "Cardiovascular Diseases" and "Respiratory Diseases" logically nested beneath it.

- 3.6. Complex elements from the input text are broken down into understandable components.
- 3.7. The overall structure of the ontology is easy to navigate and comprehend.
- 3.8. The hierarchical structure is logical, intuitive, and appropriately aligned with the specific needs of the use case and the ontology domain. For example, in an e-commerce ontology, the hierarchy might organize "Clothing" under categories like "Men's Wear > Shirts > Casual Shirts," ensuring that customers can easily navigate to the specific type of clothing they are looking for.
- 3.9. The ontology's scope aligns with the boundaries of the intended domain.

Are there specific areas where the ontology could be improved, or any aspects that you believe were particularly well-executed?